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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,246	03/24/2004	Eugene Tewari	T0690.0002	4514
32172 7590 06/27/2007 DICKSTEIN SHAPIRO LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) NEW YORK, NY 10036-2714				
			EXAMINER BARTOSIK, ANTHONY N	
			ART UNIT 3609	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/807,246

Applicant(s)

TEWARI, EUGENE

Examiner

Anthony N. Bartosik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "42" has been used to designate both "a roll up flap" and "first port". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17, directed to the specifics of a HEPA filter does not further limit the claim as stated in claim 14. A HEPA filter by definition contains the limitations of claim 17. Restating the know

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characteristics of a HEPA filter in claim 17 does not limit what was already claimed in claim 14.

3. Claims 7 and 13 are objected to because of the following informalities: Claim 7 is awkward when read and appears to contain a typographical error. Claim 13, is objected to for failing to end the claim with a period. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-12, 22, 23, and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Fortney (US 4,304,224).**

6. In Re claim 1, Figure 1 and Column 3 Lines 15-57 of Fortney discloses a living environment structure (1), the living environment structure (1) including a tent material (3) defining an interior space and a frame (2) provided on the exterior of the tent material (3) to support the tent material (3); and an air purification system coupled to the living environment structure so as to provide filtered air into the interior space.

7. In Re claim 2, Figure 1 and Column 3 Line 30 of Fortney discloses an exterior surface of the tent material that includes loops (13), the loops (13) being coupled to the frame.

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8. In Re claim 3, Figure 1 and Column 3 Line 21 of Fortney discloses a frame that includes upright members (6) and at the upright members (6) are pre-inserted into the loops (13).

9. In Re claim 4, In Re claim 3, Figure 1 and Column 3 Line 23 of Fortney discloses a frame that includes top cross-members (7) and at the top cross-members are pre-inserted into the loops (13).

10. In Re claim 5, Figure 1 of Fortney discloses frame (2) and tent materials that are modular.

11. In Re claim 6, Figure 1 and Column 5 Lines 9-16 of Fortney discloses tent material (3) that includes an opening (51) for ingress to and egress from the interior space.

12. In Re claim 7, Figure 1 and Column 5 Lines 9-16 of Fortney discloses an opening opened and closed with a zipper (52).

13. In Re claim 8, In Re claim 7, Figure 1 of Fortney discloses an opening that is a roll-up flap (51). Examiner notes that opening (51) is capable of being rolled up.

14. In Re claim 9, Column 4 Lines 21-25 of Fortney discloses tent material (3) that has an oxygen transmission rate and a water vapor transmission rate effective to prevent chemical and biological agents from entering the interior space through the tent material.

15. In Re claim 10, Figure 1 and Column 5 Lines 5-8 of Fortney discloses tent material (3) that is preferably a clear plastic material (49).

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16. In Re claim 11, Figure 1 and Column 3 Lines 34-42 of Fortney discloses a air purification system that is a positive pressure system which filters air from outside the interior space and supplies the filtered air to the interior space.

17. In Re claim 12, Figure 1 and Column 3 Lines 43-56 of Fortney discloses an air purification system that is a negative pressure system which filters both air from inside the interior space and air from outside the interior space, and supplies the filtered air to the interior space.

18. In Re claim 22, Column 4 Lines 8-9 of Fortney discloses a tent material (3) that has at least one opening (34) which operates as a one-way vent and cooperates with the air purification system for air release so that a positive pressure can be maintained within the interior space.

19. In Re claim 24, Figure 1 and Column 3 Lines 15-57 of Fortney discloses a tent material (3) having an exterior surface with a plurality of loops (13) attached thereto, the tent material (3) defining an interior space; and a plurality of frame members (2), each frame member (2) coupled to the tent material by a respective loop (13) of the plurality of loops (13) so as to support the tent material (3) exterior to the interior space; and an air purification system coupled to the living environment structure so as to provide filtered air into the interior space, wherein the tent material (3) has an oxygen transmission rate and a water vapor transmission rate effective to prevent chemical and biological agents from entering the interior space through the tent material.

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20. In Re claim 25, Figure 1 and Column 5 Lines 9-16 of Fortney discloses tent material (3) that includes an opening (51) for ingress to and egress from the interior space.

21. In Re claim 26, Figure 1 and Column 3 Lines 34-42 of Fortney discloses a air purification system that is a positive pressure system which filters air from outside the interior space and supplies the filtered air to the interior space.

22. In Re claim 27, Column 4 Lines 8-9 of Fortney discloses a tent material (3) that has at least one opening (34), which operates as a one-way vent and cooperates with the air purification system for air release so that a positive pressure can be maintained within the interior space.

23. In Re claim 28, Figure 1 and Column 3 Lines 43-56 of Fortney discloses an air purification system that is a negative pressure system which filters both air from inside the interior space and air from outside the interior space, and supplies the filtered air to the interior space.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fortney (US 4,304,224) in view of Moss (US 4,078,572). Fortney discloses the claimed

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invention except for the tent material being provided with four one-inch openings at the top four corners of the structure. Column 1 Lines 59-63 of Moss teaches the use of a hole in the top of the tent. Although the reference did not disclose four one-inch openings at the top four corners of the structure, it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. MPEP 2144.04. It therefore, would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the structure of Fortney with the holes in the top as taught by Moss.

26. Claims 13-15, 17-19, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fortney (US 4,304,224) in view of Sham et al. (US 6,464,760 B1).

27. In Re claim 13, Fortney has been discussed above and teaches the use of a two stage filter but does not employ the use of a third stage. Figures 1 and 4 as well as Column 4 Lines 8-60 of Sham et al. teach a purification system including a three stage filter that works by trapping and sterilizing biological and chemical agents. It would have been obvious to one skilled in the art at the time of the invention to modify the filter system of Sham et al. with the filter system of Fortney in order to yield an improved clean room.

28. In Re claim 14, Figures 1 and 4 as well as Column 4 Lines 8-60 of Sham et al. further teaches a three stage filter including a carbon filtration media portion (8), a HEPA Filter portion (7), and a UV-C germicidal filter portion (16).

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29. In Re claim 15, Figures 1 and 4 as well as Column 4 Lines 8-60 of Sham et al. further teaches gases, chemicals, odors and fumes being filtered through the carbon filtration media portion.

30. In Re claim 17, Figure 1 and Column 3 Lines 39-426 of Fortney discloses a HEPA Filter portion that is at least 99.97% efficient in trapping particles down to at least 0.3 microns in size.

31. In Re claim 18, both Fortney and Sham et al. inherently include a HEPA filter portion that is effective at removing solid as well as liquid particles. The inherence of a HEPA filter to remove liquid particles is evidenced by Perrotta et al. (US 6,402,812 B1) Column 4 Lines 5-8.

32. In Re claim 19, Column 4 Lines 1-5 of Sham et al. further teaches a UV-C germicidal filter portion (16) comprises a UV lamp which kills pathogens after a predetermined amount of exposure time.

33. In Re claim 29, Figures 1 and 4 as well as Column 4 Lines 8-60 of Sham et al. teaches a purification system including a three stage filter that works by trapping and sterilizing biological and chemical agents.

34. In Re claim 30, Figures 1 and 4 as well as Column 4 Lines 8-60 of Sham et al. further teaches a three stage filter including a carbon filtration media portion (8), a HEPA Filter portion (7), and a UV-C germicidal filter portion (16).

35. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fortney (US 4,304,224) and Sham et al. (US 6,464,760) as applied to claims 1, 13-15 above, and further in view of Deitz (US 4,518,562).

Fortney and Sham have been discussed above and teach the use of a carbon filter, but do not teach that filter to be nuclear grade activated. Deitz teaches the use of a nuclear grade activated carbon filters to trap radioactive iodine. It would have been obvious to one skilled in the art at the time of the invention to modify the carbon filters of Sham with the nuclear grade activated carbon filters of Deitz in order to trap radioactive iodine.

36. **Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fortney (US 4,304,224) in view of Sham et al. (US 6,464,760 B1) and Haidinger et al. (US 5,505,904).** Fortney and Sham et al. have been discussed above and teach the limitations of claim 20 with the exception of UV-C filter portion being a four lamp system rated to supply over 150,000 microwatts/cm² at a fan speed of 100 cfm. Column 4 Lines 1-5 of Haidinger et al. teach the use of a UV-C filter portion containing four lamps with a preferred rating of 140 microwatts. It is commonly know in the art that strains of bacteria, viruses, and pathogens require a varied germicidal dose in order to eliminate each certain strain. It therefore, would have been obvious to one skilled in the art at the time of the invention to modify the filters Fortney and Sham et al. with the four lamp UV-C filter of Haidinger et al. to increase the filters effectiveness. Furthermore, it would have been obvious to one skilled in the art at the time of the invention to supply over 150,000 microwatts/cm² at a fan speed of 100 cfm in order to eliminate particular strains of bacteria that were susceptible to ratings of less then or equal to said levels.

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37. **Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fortney (US 4,304,224) and Sham et al. (US 6,464,760 B1) as applied to claims 1 & 13 above, and further in view of Messina (US 5,240,478).** Fortney and Sham have been discussed above and teach the use of an air purification system containing a pre-filter (16), however, the combination of references fails to teach the use of an anti-microbial filter. Column 5 Lines 33-34 of Messina teaches the application of an anti-microbial treatment to a HEPA filter to kill bacteria during filtration, thereby resulting in an anti-microbial filter. It therefore, would have been obvious to one skilled in the art at the time of the invention to modify the HEPA filter of Fortney and Sham et al. to include an anti-microbial treatment in order to kill bacteria during filtration.

Conclusion

Prior art made of record but not relied upon is considered pertinent to applicant's disclosure. Tillmans (US 46,322,614), Perrotta et al. (US 6,402,812), Mintie et al. (US 7,134,444), Brown (US 6,554,013 & US 6,390,110), Paes et al. (US 6,068,009), Koeger (US 6,923,716), Baldwin (US 5,537,784), Nilsson (US 5,331,991), Critchley (US 5,326,211), Eller et al. (US 5,090,972), Anderson et al. (US 4,707,953), Ashley (US 4,675,923), Donnelly et al. (US 3,766,844), Sadone Max S et al. (US 3,345,996). Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony N. Bartosik whose telephone number is 2723600. The examiner can normally be reached on M-F 7:30-5:00; Alter Fri Off E.D.T.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Batson Victor can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Batson
Supervisory Patent Examiner
Art Unit 3600

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6/2007